MULCHING

PRACTICE INTRODUCTION

USDA, Natural Resources Conservation Service - practice code 484



MULCHING

Mulching is applying a protective cover of plant residue or other suitable material not produced on the site to the soil surface.

PRACTICE INFORMATION

This practice is used to help control erosion, protect crops, conserve moisture, prevent compaction/crusting, reduce runoff, and help control weeds. The practice is utilized on sites subject to erosion and high runoff that need the additional protection from material brought in from off the site. The material may be

manufactured and commercially available or it may be hay or crop residue hauled to the site and applied.

This is a high input practice used primarily on construction sites. However, the practice is often used in production of specialty crops including grapes, fruit, and vegetables.

Additional information including standards and specifications are on file in the local NRCS Field Office Technical Guide.

The following pages contain the conservation effects expected to occur when this practice is applied. These effects are subjective and somewhat dependent on variables such as climate, terrain, soil, etc. Users are cautioned that these effects are estimates that may or may not apply to a specific site.

CONSERVATION PRACTICE PHYSICAL EFFECT WORKSHEET

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<u></u>	NOTES: Produced off site	
PRACTICE: 484 Mulching		
RESOURCE: SOIL	Help Message: Click on form field for choice lists. Tab	
RESOURCE CONCERN: EROSION	key to move around. "N/A" is the default.	
RESOURCE INDICATORS	PHYSICAL EFFECTS	
SHEET AND RILL	significant reduction in sheet and rill erosion	
WIND	significant reduction in wind erosion	
EPHEMERAL GULLY	significant reduction in ephemeral gully erosion	
CLASSIC GULLY	N/A	
STREAMBANK	moderate reduction in streambank erosion	
IRRIGATION INDUCED	moderate reduction in irrigation induced erosion	
SOIL MASS MOVEMENT	insignificant	
ROADBANK/CONSTRUCTION	significant decrease in roadbank/const. erosion	
OTHER		
RESOURCE CONCERN: SOIL CONDITION		
SOIL TILTH	significant improvement in soil tilth	
SOIL COMPACTION	significant reduction in soil compaction	
SOIL CONTAMINATION		
• SALTS	slight reduction in soil salinity	
ORGANICS	N/A	
• FERTILIZERS	N/A	
• PESTICIDES	N/A	
• OTHER		
DEPOSITION/DAMAGE		
ONSITE	significant reduction/onsite deposition damage	
OFFSITE	significant decrease/offsite deposition damage	
DEPOSITION/SAFETY		
ONSITE	significantly improve onsite safety/deposition	
• OFFSITE	sign. improve offsite safety hazard/deposition	
OTHER		
RESOURCE: WATER		
RESOURCE CONCERN: WATER QUANTIT	Y	
SEEPS	N/A	
RUNOFF/FLOODING	insignificant	
EXCESS SUBSURFACE WATER	slight increase in excess subsurface water	
INADEQUATE OUTLETS	insignificant	
WATER MGT. IRRIGATION		
• SURFACE	significant improvement in irrigation efficiency	
SPRINKLER	significant improvement in irrigation efficiency	
WATER MGT. NON-IRRIGATED	significant improvement in moisture use	
RESTRICTED FLOW CAPACITY		
• ONSITE	insignificant	
OFFSITE	insignificant	
RESTRICTED STORAGE	sign. reduction in sedimentation of H20 storage	
OTHER		

RESOURCE: WATER		
RESOURCE CONCERN: WATER QUALITY		
RESOURCE INDICATORS	PHYSICAL EFFECTS	
GROUNDWATER CONTAMINANTS		
• PESTICIDES	N/A	
 NUTRIENTS AND ORGANICS 	N/A	
• SALINITY	N/A	
HEAVY METALS	N/A	
• PATHOGENS	N/A	
• OTHER		
SURFACE WATER CONTAMINANTS		
• PESTICIDES	insignificant	
NUTRIENTS AND ORGANICS	insignificant	
SUSPENDED SEDIMENTS	insignficant	
LOW DISSOLVED OXYGEN	insignificant	
• SALINITY	insignificant	
HEAVY METALS	insignificant	
WATER TEMPERATURE	N/A	
• PATHOGENS	insignificant	
AQUATIC HABITAT SUITABILITY	significant improvement in Aqua. Hab. Suit.	
OTHER		
RESOURCE: AIR		
RESOURCE CONCERN: AIR QUALI	TY	
AIRBORNE SEDIMENT AND SMOKE		
PARTICLES		
ONSITE SAFETY	sign. decrease in airborn sed.&smoke part./safety	
OFFSITE SAFETY	sign. decrease in airborn sed.&smoke part./safety	
ONSITE STRUCT. PROBLEMS	sign. decrease in struc. problems/dust and smoke	
OFFSITE STRUCT. PROBLEMS	sign. decrease in struc. problems/dust and smoke	
ONSITE HEALTH	sign. decrease in onsite health prob./dust&smoke	
OFFSITE HEALTH	sign. improvement in offlsite health	
AIRBORNE SEDIMENT CAUSING	sign. decrease in airborn sediment/convey. prob.	
CONVEYANCE PROBLEMS		
AIRBORNE CHEMICAL DRIFT	insignificant	
AIRBORNE ODORS	insignificant	
FUNGI, MOLDS, AND POLLEN	insignificant	
OTHER CONDI	TION	
RESOURCE CONCERN: AIR CONDITION		
AIR TEMPERATURE	insignficant	
AIR MOVEMENT (windbreak effect)	insignificant	
HUMIDITY	insignificant	
OTHER		

RESOURCE INDICATORS	PHYSICAL EFFECTS
SITE ADAPTATION	
PLANT USE	moder. improvement in plant suitability/site adapt moder. improvement in plant suit. for intended use
OTHER	moder. Improvement in plant suit. for intended use
OTHER	
RESOURCE CONCERN: CONDITION	
PRODUCTIVITY	sign. improvement in plant cond./ productivity
HEALTH, VIGOR, SURVIVAL	sign. improvement in plant health, vigor, survival
OTHER	
RESOURCE CONCERN: MANAGEM	ENT
ESTAB., GROWTH, HARVEST	sign. improvement in plant estab.,growth,harvest
NUTRIENT MANAGEMENT	sign. improvement in plant nutrient management
PESTS	moder. improvement in plant pest management
THREAT/ENDANGERED PLANTS	N/A
OTHER ANIMAL	
RESOURCE: ANIMAL	
RESOURCE CONCERN: HABITAT	Line in Count
FOOD COVER/SHELTER	insignficant insignificant
WATER (QUANTITY & QUALITY)	N/A
OTHER	IN/A
RESOURCE CONCERN: MANAGEM	ENT
POPULATION BALANCE	N/A
THREAT/ENDANGERED ANIMALS	N/A
HEALTH	N/A
OTHER	
RESOURCE: HUMAN RESOURCE CONCERNS: ECONOMI	C CONSIDERATIONS
PLAN / COST EFFECTIVENESS	significantly cost effective
CLIENT FINANCIAL CONDITION	significantly cost effective
MARKETS FOR PRODUCTS	N/A
AVAILABLE LABOR	sign. increase in labor requirement
AVAILABLE EQUIPMENT	sign. increase in equip. needed
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RESOURCE: HUMAN		
RESOURCE CONCERN: SOCIAL CONSIDERATIONS		
RESOURCE INDICATORS	PHYSICAL EFFECTS	
PUBLIC HEALTH AND SAFETY	insignificant	
PRIVATE/PUBLIC VALUES	insignificant	
CLIENT CHARACTERISTICS	insignificant	
RISK TOLERANCE	N/A	
TENURE	N/A	
OTHER		
RESOURCE CONCERN: CULTURAL	CONSIDERATIONS	
ABSENCE/PRESENCE OF CULTURAL RESOURCES	insignificant	
SIGNIFICANCE OF CULTURAL RESOURCES	insignificant	
MITIGATION OF NEGATIVE CULTURAL RES. IMPACTS	insignificant	
OTHER		